

REMARKS

Claims 1 and 3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiyuki et al. (JP 07-128674) and Ito et al. (U.S. Patent No. 6,231,917). In response, Applicants respectfully traverse the rejection because the cited references fail to disclose or suggest a liquid crystal display device manufacturing method having a step of blowing a gas against a liquid crystal supply needle after a step of dropping liquid crystal.

The Office Action indicates on page 3, line 6 that Yoshiyuki fails to disclose a liquid crystal display device manufacturing method comprising the step of blowing a gas against a liquid crystal supply needle after the dropping of the liquid crystal step. However, the Office Action cites Ito as teaching this feature. More specifically, FIGs. 11A-C are cited as teaching a method of forming a liquid film including the step of blowing a gas against a liquid crystal needle with force and arranged around the supply needle/tip.

It is concluded in the Office Action that a liquid crystal display device manufacturing method comprising the step of blowing a gas with external force against the liquid crystal supply needle/tip after the dropping the liquid crystal step for shutting out liquid crystal is disclosed. (See col. 5, lns. 45-46). Therefore, the Office Action states that it would be obvious for one of ordinary skill to further modify the liquid crystal display device manufacturing method to include a step of blowing gas with external force 16a against a liquid crystal supply needle/tip after the dropping a liquid crystal step for shutting out liquid crystal. Applicants respectfully traverse this statement.

Yoshiyuki fails to disclose or suggest a liquid crystal display device manufacturing method that has a step of blowing a gas against a liquid crystal supply needle *after* the dropping of the liquid crystal. The Office Action notes this deficiency as well on page 3, lines 6-8. Nonetheless, Ito is cited as teaching the step of blowing a gas against a liquid crystal supply needle.

Ito shows in FIGs. 5A-C, 9A-B, 10A-C, and 11A-C steps for blowing the liquid crystal. Ito shows, for example, in FIGs. 11A-C gas spray portions 72a, 72b that are located below a liquid crystal supply nozzle 11. Liquid crystal 13 flows in the liquid crystal nozzle 11, and then after passing through the liquid supply nozzle 11 is redirected by the gas spray portions 72a, 72b to liquid collection portions 63a, 63b. As shown in FIGs. 11B-C, the liquid crystal 13 is not redirected until after falling a certain distance from the liquid supply nozzle 11.

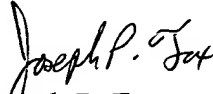
Therefore, Applicants respectfully submit that after the step of dropping the liquid crystal, Ito fails to disclose or suggest blowing air or any other medium toward the liquid crystal supply nozzle 11 since the liquid crystal exiting from the liquid supply needle 11 is not redirected until after it begins falling, as shown in the figures. For this reason, Applicants respectfully traverse the rejection that the cited references disclose or suggest the step of blowing a gas against a liquid crystal supply needle after the step of dropping the liquid crystal, and request withdrawal of the §103 rejection of claim 1 and its dependent claim 3.

For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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